AMENDMENTS TO THE CLAIMS:

1. (Original) A see-through medaka wherein said medaka is deficient in iridophores, melanophores, xanthophores and leucophores.

2. (Currently amended) The see-through medaka according to claim 1 wherein said medaka is produced by ~~means of~~ repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f.

3. (Currently amended) A see-through medaka wherein said medaka is produced by ~~means of~~ further selective mating between the see-through medaka according to claim 2 and iridophore deficient mutant medaka strain il-1.

4. (Original) A see-through medaka wherein said medaka is deficient in iridophores, melanophores and xanthophores, and wherein the sex of said medaka can be identified by the presence or absence of leucophores and/or a DNA marker.

5. (Currently amended) The see-through medaka according to claim 4 wherein said medaka is produced by ~~means of~~ repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female.

6. (Currently amended) A see-through medaka wherein said medaka is produced by ~~means of~~ further selective mating between the see-through medaka according to claim 3 and a see-through mekaka produced by ~~means of~~ repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female.

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7. (Currently amended) A transgenic see-through medaka deficient in iridophores, melanophores, xanthophores and leucophores, having in its genome a transgene ~~wherein a specific organ is allowed to produce luminescence by introducing a hybrid gene~~ being a fusion of a promoter of a gene which expresses specifically in ~~said~~ a specific organ, with a coding region of a gene encoding a fluorescent protein, wherein said fluorescent protein is expressed specifically in said organ.

8. (Currently amended) A transgenic see-through medaka produced by ~~means of~~ further selective mating between the see-through medaka according to claim 2 and an iridophore deficient mutant medaka strain il-1,

wherein a ~~specific organ is allowed to produce luminescence by introducing a hybrid gene~~ transgene being a fusion of a promoter of a gene which expresses specifically in ~~said~~ a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the see-through medaka according to claim 2 and the iridophore deficient mutant medaka strain il-1,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

9. (Currently amended) A transgenic see-through medaka deficient in iridophores, melanopores and xanthophores, wherein the sex of said medaka can be identified by the presence or absence of leucophores and/or a DNA marker, having in its genome a transgene ~~wherein a specific organ is allowed to produce luminescence by introducing a hybrid gene~~ being a fusion of a promoter of a gene which expresses specifically in ~~said~~ a specific organ, with a coding region of a gene encoding a

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fluorescent protein, wherein said fluorescent protein is expressed specifically in said organ.

10. (Currently amended) A transgenic see-through medaka produced by ~~means of~~ further selective mating between the see-through medaka according to claim 3 and a see-through medaka produced by ~~means of~~ repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female,

wherein a ~~specific organ is allowed to produce luminescence by introducing a hybrid gene~~ transgene being a fusion of a promoter of a gene which expresses specifically in ~~said~~ a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the see-through medaka according to claim 3 and a see-through medaka produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

11. (Previously amended) The transgenic see-through medaka according to claim 7 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

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12. (Previously amended) The transgenic see-through medaka according to claim 8 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

13. (Previously amended) The transgenic see-through medaka according to claim 9 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

14. (Previously amended) The transgenic see-through medaka according to claim 10 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

15. (Previously amended) The transgenic see-through medaka according to claim 7 wherein said organ is a gonadal organ.

16. (Previously amended) The transgenic see-through medaka according to claim 8 wherein said organ is a gonadal organ.

17. (Previously amended) The transgenic see-through medaka according to claim 9 wherein said organ is a gonadal organ.

18. (Previously amended) The transgenic see-through medaka according to claim 10 wherein said organ is a gonadal organ.

19. (Previously amended) The transgenic see-through medaka according to claim 11 wherein said organ is a gonadal organ.

20. (Previously amended) The transgenic see-through medaka according to claim 12 wherein said organ is a gonadal organ.

21. (Previously amended) The transgenic see-through medaka according to claim 13 wherein said organ is a gonadal organ.

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22. (Previously amended) The transgenic see-through medaka according to claim 14 wherein said organ is a gonadal organ.

23. (Currently amended) A transgenic see-through medaka produced by ~~means of~~ repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f,

wherein a ~~specific organ is allowed to produce luminescence by introducing a hybrid gene~~ transgene being a fusion of a promoter of a gene which expresses specifically in ~~said~~ a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

24. (Currently amended) A transgenic see-through medaka produced by ~~means of~~ repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female,

wherein a ~~specific organ is allowed to produce luminescence by introducing a hybrid gene~~ transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female,

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so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

25. (Previously added) The transgenic see-through medaka according to claim 23 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

26. (Previously added) The transgenic see-through medaka according to claim 24 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

27. (Previously added) The transgenic see-though medaka according to claim 23 wherein said organ is a gonadal organ.

28. (Previously added) The transgenic see-through medaka according to claim 24 wherein said organ is a gonadal organ.

29. (Previously added) The transgenic see-through medaka according to claim 25 wherein said organ is a gonadal organ.

30. (Previously added) The transgenic see-through medaka according to claim 26 wherein said organ is a gonadal organ.

31. (New) The see-through medaka according to claim 1 wherein said medaka is obtainable by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f.

32. (New) A see-through medaka wherein said medaka is obtainable by further selective mating between the see-through medaka according to claim 31 and iridophore deficient mutant medaka strain il-1.

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33. (New) The see-through medaka according to claim 4 wherein said medaka is obtainable by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female.

34. (New) A see-through medaka wherein said medaka is obtainable by further selective mating between the see-through medaka according to claim 32 and a see-through mekaka obtainable by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female.

35. (New) A transgenic see-through medaka obtainable by further selective mating between the see-through medaka according to claim 31 and an iridophore deficient mutant medaka strain il-1, wherein the transgenic see-through medaka has in its genome a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, and wherein said fluorescent protein is expressed specifically in said organ.

36. (New) A transgenic see-through medaka obtainable by further selective mating between the see-through medaka according to claim 32 and a see-through medaka obtainable by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female, wherein the transgenic see-through medaka has in its genome a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a

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coding region of a gene encoding a fluorescent protein, and wherein said fluorescent protein is expressed specifically in said organ.

37. (New) The transgenic see-through medaka according to claim 35 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

38. (New) The transgenic see-through medaka according to claim 36 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

39. (New) The transgenic see-through medaka according to claim 35 wherein said organ is a gonadal organ.

40. (New) The transgenic see-through medaka according to claim 36 wherein said organ is a gonadal organ.

41. (New) The transgenic see-through medaka according to claim 37 wherein said organ is a gonadal organ.

42. (New) The transgenic see-through medaka according to claim 38 wherein said organ is a gonadal organ.

43. (New) A transgenic see-through medaka obtainable by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f, wherein the transgenic see-through medaka has in its genome a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, and wherein said fluorescent protein is expressed specifically in said organ.

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44. (New) A transgenic see-through medaka obtainable by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female, wherein the transgenic see-through medaka has in its genome a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, and wherein said fluorescent protein is expressed specifically in said organ.

45. (New) The transgenic see-through medaka according to claim 43 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

46. (New) The transgenic see-through medaka according to claim 44 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

47. (New) The transgenic see-though medaka according to claim 43 wherein said organ is a gonadal organ.

48. (New) The transgenic see-through medaka according to claim 44 wherein said organ is a gonadal organ.

49. (New) The transgenic see-through medaka according to claim 45 wherein said organ is a gonadal organ.

50. (New) The transgenic see-through medaka according to claim 46 wherein said organ is a gonadal organ.

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